CLAIMS:

1. A polarizer device of Glan-Thompson type comprising

first and second prisms made of a birefringent material having certain dispersion profiles $n_o(\lambda)$ and $n_e(\lambda)$ for, respectively ordinary and extraordinary polarization axis and being coupled to each other by a binding material layer, wherein said binding material has a dispersion profile, $n_g(\lambda)$, matching said dispersion profiles $n_o(\lambda)$ and $n_e(\lambda)$ so as to provide an effect of total internal reflection within a spectral range including short wavelength of about 190nm.

2. The device of Claim 1, wherein said prisms made of α-BBO crystals.

3. The device of any of the preceding Claims, wherein said first and second prisms have a cut angle θ' of about 31°.

4. The device of any of the preceding Claims, wherein said binding material is RTV silicone.

5. The device of any of the preceding Claims, wherein said binding material is a two-part material.

6. The device of any of the preceding Claims, wherein said binding material has controlled volatility.

7. The device of any of the preceding Claims, wherein said binding material has low viscosity.

8. The device of any of the preceding Claims, wherein said binding material is CV15-2500 optical glue, commercially available from NuSil Technology, USA.

9. The device of any of the preceding Claims, wherein said binding material layer has a thickness of a few microns.

10. The device of any of the preceding Claims, wherein said binding material layer includes a mixture of an optical glue material with small beads of solid transparent material.

11. The device of Claim 10, wherein said beads are uniformly distributed within the glue material with a surface area concentration of the beads substantially not exceeding $10^{-6}cm^{-2}$.

12. The device of any of the preceding Claims, wherein each of the prisms' facets defining side facets of the device for inputting and outputting light has a circular geometry.

13. The device of any of the preceding Claims, wherein each of the prisms' facets defining side facets of the device for inputting and outputting light is a polygon of more than four angles.

14. The device of any of the preceding Claims, wherein each of the prisms' facets defining side facets of the device for inputting and outputting light is an eight-angle polygon.

15. A polarizer device of Glan-Thompson type comprising first and second prisms made of a birefringent material having certain dispersion profiles $n_o(\lambda)$ and $n_e(\lambda)$ for, respectively ordinary and extraordinary polarization axis and being coupled to each other by a binding material layer including a mixture of a binding material and small beads of a solid transparent material, wherein said binding material has a dispersion profile, $n_g(\lambda)$, matching said dispersion profiles $n_o(\lambda)$ and $n_e(\lambda)$ so as to provide an effect of total internal reflection within a spectral range including short wavelength of about 190nm.

16. A polarizer device of Glan-Thompson type comprising first and second prisms made of a birefringent material having certain dispersion profiles $n_o(\lambda)$ and $n_e(\lambda)$ for, respectively ordinary and extraordinary polarization axis and being coupled to each other by a binding material layer including a mixture of a binding material and small beads of a solid transparent material, wherein said binding material has a dispersion profile, $n_g(\lambda)$, matching said dispersion profiles $n_o(\lambda)$ and $n_e(\lambda)$ so as to provide an effect of total internal reflection within a spectral range including short wavelength of about 190nm and wherein the beads being substantially uniformly distributed within the binding material layer with a surface area concentration, C_s, substantially not exceeding $10^{-6}cm^{-2}$.

17. A polarizer device comprising first and second prisms coupled to each other by their tilted surfaces; and a binding material layer between said tilted surfaces of the prisms, said layer including a mixture of a binding transparent material and small beads of a solid transparent material, the binding material layer thereby having a substantially uniform thickness of about 5-10 microns.A polarizer device having opposite side facets serving for,

respectively, inputting and outputting light, wherein each of said side facets is either a circle or a polygon of more than four angles.

18. A method of manufacturing a polarizer device of Glan-Thompson type comprising providing first and second prisms made of a selected birefringent material having certain dispersion profiles $n_o(\lambda)$ and $n_e(\lambda)$ for, respectively ordinary and extraordinary polarization axis, selecting a binding material having a dispersion profile, $n_g(\lambda)$, matching said dispersion profiles $n_o(\lambda)$ and $n_e(\lambda)$ so as to provide an effect of total internal reflection within a spectral range including short wavelength of about 190nm and attaching the tilted surfaces of the prisms to each other by a layer of said binding material.

19. A method of manufacturing a polarizer device of Glan-Thompson type comprising providing first and second prisms coupled to each other at their tilted surfaces by a binding material layer, which includes a mixture of a binding transparent material and small beads of a solid transparent material, the binding material layer thereby having a substantially uniform thickness of about 5-10 microns.

20. A method of manufacturing a polarizer device of Glan-Thompson type comprising providing first and second prisms coupled to each other at their tilted surfaces by a binding material layer, which includes a mixture of a binding transparent material and small beads of a solid transparent material, the binding material layer thereby having a substantially uniform thickness of about 5-10 microns.

21. The method for manufacturing a polarizer device of Glan-Thompson type of any of the preceding method Claims comprising configuring opposite side facets serving for, respectively, inputting and outputting light, to be either a circle or a polygon of more than four angles, thereby minimizing a footprint of the polarizer device.